

[First Hit](#) [Fwd Refs](#)[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)[End of Result Set](#) [Generate Collection](#) [Print](#)

L1: Entry 1 of 1

File: USPT

Mar 23, 2004

US-PAT-NO: 6709660DOCUMENT-IDENTIFIER: US 6709660 B1

TITLE: Meningococcal antigens

DATE-ISSUED: March 23, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Scarlato; Vincenzo	Siena			IT
Masignani; Vega	Siena			IT
Rappuoli; Rino	Siena			IT
Pizza; Mariagrazia	Siena			IT
Grandi; Guido	Siena			IT

US-CL-CURRENT: 424/250.1; 424/185.1, 424/190.1, 424/234.1, 424/249.1, 530/300,
530/350

CLAIMS:

What is claimed is:

1. An isolated or recombinant protein comprising an amino acid sequence selected from the group consisting of SEQ ID NOS: 2, 4, and 6.
2. An isolated or recombinant protein comprising an immunogenic fragment having 60% or greater sequence identity to the contiguous sequence of amino acids depicted in SEQ ID NOS: 2, 4, or 6.
3. A composition comprising a protein of claim 1 or 2.
4. A diagnostic composition comprising a protein of claim 1 or 2.
5. A pharmaceutical composition according to claim 3.
6. An isolated or recombinant protein of claim 2, where in the protein has 80% or greater sequence identity to the contiguous sequence of amino acids depicted in SEQ ID NOS: 2, 4, or 6.
7. An isolated or recombinant protein of claim 2, wherein the protein has 90% or greater sequence identity to the contiguous sequence of amino acids depicted in SEQ ID NOS: 2, 4, or 6.
8. An isolated or recombinant protein of claim 2, wherein the protein has 95% or greater sequence identity to the contiguous sequence of amino acids

depicted in SEQ ID NOS: 2, 4, or 6.

9. A pharmaceutical composition according to claim 4.

[Previous Doc](#)

[Next Doc](#)

[Go to Doc#](#)